## **Storm Data and Unusual Weather Phenomena**

Time Path Path Number of Estimated November 2002

Location Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm

### INDIANA, Northeast

**Blackford County** 

5 SW Hartford City to 10 1430EST 5 100 0 3 250K Tornado (F1) Hartford City 1436EST

This tornado touched down 5 miles southwest of Hartford City and then moved into Hartford City before lifting. An NWS ground survey found F0 to F1 damage along its path with F1 damage to a supermarket and a motel. One home and 2 mobile homes were destroyed in Hartford City. 3 persons were injured, none seriously.

**Wells County** 

1 E Petroleum to 10 1446EST 1 100 0 0 5K Tornado (F0) 1 NE Petroleum

This tornado touched down briefly in Wells county just east of Petroleum. An NWS areal survey found F0 damage occurred along a 1 mile path about 100 yards wide mainly to trees. Two small outbuildings were also damaged.

**Adams County** 

2 NE Berne to 10 1459EST 5 200 0 0 125K Tornado (F3) 1 NE Salem

This tornado touched down 2 miles northeast of Berne and moved just northeast of Salem before lifting.

An NWS ground survey found F3 damage at times 200 yards wide northeast of Berne. Much of the damage was to extremely well built Amish barns and homes. A mobile home was also destroyed near Salem.

**Adams County** 

1 N Decatur 10 1500EST 0 0 0 Thunderstorm Wind

A trained spotter reported numerous trees down just north of Decatur.

**Grant County** 

2 S Upland 10 1517EST 0 0 0 Hail(0.88)

A trained spotter reported nickel size hail south of Upland.

### OHIO, Northwest

Van Wert County 3.6 NE Willshire to 6.6 E Scott

10 1515EST 21.6 880 2 17 30M Tornado (F4)



This picture is from the back seats of the Twin Cinemas. Cars from the parking lot are shown in the front rows of the cinema and where the projection screen had been. Photo courtesy of Paul Van Dyke.

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Location Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm

#### OHIO, Northwest

This tornado touched down in the southwest corner of Van Wert County about 4 miles northeast of Willshire and moved northeast across the western portion of the city of Van Wert, and then crossed U.S. 30 and continued northeast before exiting the county about 7 miles east of Scott. NWS ground and aerial surveys showed the tornado quickly intensified to F4 about 5 miles southwest of the city of Van Wert near Zook road, where a 75 year old male was killed in his home. The tornado continued moving northeast as an F4 into the city of Van Wert, were it hit the Twin Cinemas and the Vision Industrial Park. At this point the tornado was about one half mile wide. 60 persons watching a movie in the cinemas, mostly children, took shelter before the tornado hit, with only minor injuries. Vehicles from the parking lot were thrown into the seats where the children had been sitting. An 18 year old male driving past the cinemas was thrown from his vehicle and killed. The tornado then destroyed five industries in the Vision Industrial Park, before moving north of U.S. 30, producing F4 damage to additional businesses and homes. The tornado weakened to F3 as it moved northeast and crossed into Paulding county. 164 homes were damaged in Van Wert county, and 43 were totally destroyed. 27 businesses sustained damage, with 5 totally destroyed in Vision Park. Three county engineer buildings were destroyed, with one house used by a township. Total damage in Van Wert county was near 30 million dollars. M18VE, M75PH

Paulding County 3 SW Roselms to 2.4 SE Oakwood

10 1543EST 9 440 0 5 7M Tornado (F3) 1558EST

This tornado originated in Van Wert county and crossed into Paulding county 3 miles southwest of Roselms and exited Paulding county about 2.5 miles southeast of Oakwood. NWS ground and aerial survey found F3 damage along the entire path in Paulding county, with only one structure remaining standing in the town of Roselms, in which the town residents had taken cover in the basement. Over 70 structures were damaged, with 13 homes, 32 barns, a church, and a township house leveled. Total damage was near 7 million dollars.

**Putnam County** 

4.2 WSW Continental to 10 1558EST 7.2 440 2 2 750K Tornado (F3) 4.7 N Continental 1603EST

This tornado originated in Van Wert county and moved across Paulding county into Putnam county about 4 miles west southwest of Continental. NWS ground and aerial survey found F3 damage as the tornado entered Putnam county, striking a mobile home and killing a husband and wife. The tornado moved northeast across the northwest corner of Putnam county, quickly weakening to an F0 as it exited the county 4.5 miles north of Continental. The tornado damaged or destroyed 5 homes and numerous barns along with farm equipment.

M72MH, F67MH

**Defiance County** 

5.3 SE Ayersville to 10 1603EST 3 50 0 0 25K Tornado (F0) 4.1 SE Ayersville 1609EST

This tornado originated in Van Wert county and moved across Paulding and Putnam counties before entering the extreme southwest corner of Defiance county about 5 miles southeast of Ayersville. NWS ground and aerial survey found the tornado was skipping, and produced F0 damage to five homes, some trees and a few barns and outbuildings. The tornado then exited Defiance county about 4 miles southeast of Ayersville.

Henry County 6.2 SE Holgate to 2.1 SE Malinta

10 1609EST 12 50 0 0 10K Tornado (F0)

This tornado originated in Van Wert county and moved across Paulding, Putnam and Defiance counties before entering southwest Henry county about 6 miles southeast of Holgate. NWS ground and aerial survey found the tornado was skipping and producing F0 damage to trees and outbuildings as it moved northwest of Holgate. The tornado continued to move northeast before dissipating about 2 miles southeast of Malinta.

On Sunday, November 10th, 2002 a cold front trailed from a deep surface low over northern Lake Michigan into central Missouri. Ahead of the cold front the KILN (Wilmington, OH) 1200 UTC sounding showed an unstable airmass with CAPE (Convectively Available Potential Energy) of 1148 J/kg and a Storm Relative Helicity (SRH) of 408 m/s2. Another sounding at 1800 UTC showed CAPE had increased on a modified sounding to 1313 J/kg, with SRH increasing to 587 m/s2. A broken squall line developed from Indianapolis to Fort Wayne Indiana and Defiance Ohio with the cold front. A small low topped supercell developed ahead of the line over Blackford county Indiana and was moving northeast at 50 MPH. This parent supercell produced 3 seperate tornadoes in Indiana (see StormData, Indiana, Northeast for more information) before crossing into Ohio. There the supercell intensified and a tornado touched down in Van Wert County Ohio, reaching F4 in strength as it reached the city of Van Wert. The tornado then moved northeast with a total path length of 53 miles, producing F3 damage in Paulding and Putnam counties, and F0 damage in Defiance and Henry counties.

Henry County
2 SE Hamler

10 1630EST 0 0 50K Thunderstorm Wind (G70)

Emergency management reported a train was derailed by high winds estimated to be near 80 mph. This wind was likely downburst winds from the collapse of the parent supercell that produce a tornado farther west in Henry minutes earlier.

# **Storm Data and Unusual Weather Phenomena**

		Time Local/	Path Langth	Path Width	Number of Persons		Estimated Damage		November 2002
Location	Date	Standard	Length (Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm
OHIO, Northwest									
Allen County Cairo	10 Sheriff	1634EST reported trees and	l power lines	down in Cair	<b>0</b>	0	0		Thunderstorm Wind
Allen County Lima	10 Sheriff	1640EST reported trees and	l power lines	down in and	<b>0</b> around Lir	<b>0</b> na.	0		Thunderstorm Wind